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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/633,676 08/05/2003		08/05/2003	Shunpei Yamazaki	07977-074002	6898	
26171	7590	04/27/2006		EXAM	EXAMINER	
FISH & RI	CHARD	SON P.C.	LEE, MICHAEL			
P.O. BOX 1 MINNEAPO		N 55440-1022		ART UNIT	PAPER NUMBER	
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				DATE MAILED: 04/27/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

		. Ap	Application No. Applicant(s)						
Office Action Summary			/633,676	YAMAZAKI ET AI	YAMAZAKI ET AL.				
			aminer	Art Unit					
			Lee	2622					
Period fo	The MAILING DATE of this communion Reply	ication appears	on the cover sheet	with the correspondence ac	ddress				
WHI( - Exte after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MINIOR OF THE PROPERTY	AILING DATE of 37 CFR 1.136(a). unication. tutory period will app will, by statute, caus	OF THIS COMMUNITY IN THE PROPERTY OF THIS COMMUNITY IN THE PROPERTY OF THE PRO	NICATION. a reply be timely filed  ONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).					
Status									
1)[🔀	Responsive to communication(s) file	d on 05 Augus	t 2003						
·	•		on is non-final.						
3)	, <del>-</del>								
-/-	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims	·	•						
4)	Claim(s) <u>28-44</u> is/are pending in the application.								
•,	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)🖂	Claim(s) 32-35 is/are allowed.								
·	Claim(s) <u>28-31, 36-44</u> is/are rejected.								
7)	Claim(s) is/are objected to.								
8)									
Applicat	ion Papers								
_	The specification is objected to by the	Evaminor							
·			d or h) objected t	o by the Evaminer					
10/	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)	The oath or declaration is objected to		·		/ • •				
	under 35 U.S.C. § 119	by the Examin	ior. Note the attach	od Onice Action of Tomit					
			"	0.440(.) (1) (0					
	2) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)	) All b) Some * c) None of:								
	<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No. 08/730,414.</li> </ul>								
	3. Copies of the certified copies of	· · ·		en received in this National	Stage				
* 0	application from the Internation See the attached detailed Office action	· ·		at raceived					
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	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P	TO-948)		v Summary (PTO-413) o(s)/Mail Date					
3) 🔯 Infori	mation Disclosure Statement(s) (PTO-1449 or or No(s)/Mail Date 9/17/04, 4/30/04,			f Informal Patent Application (PT	O-152)				

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogi et al. (5,376,944).

Regarding claim 28, Mogi discloses a liquid crystal display device showing a first active matrix (X1-X119), a second active matrix (X120-X238), a horizontal scanning control circuit (16), a first vertical scanning control circuit (20), and a second vertical scanning control circuit (21). The liquid crystal display device displays images in color. However, Mogi does not specify that the first active matrix circuit generates at least one red, green, or blue image, and the second active matrix circuit generates a white image as claimed. The examiner takes Official Notice that using liquid crystal display devices to display different color of image signals is well known in the art because they are intended to display all kinds of image signals. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the liquid crystal display device of Mogi to display the color and white images as claimed.

Regarding claims 29-31, Mogi does not specify that the claimed respective circuits are made of thin film transistors. In any event, the examiner takes Official Notice that using thin film transistors to implement a liquid crystal display device is well

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known in the art due to the fact that the viewing angle, response time and the contrast performance are much better than that passive type LCD. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ thin film transistor to implement the liquid crystal display device as claimed.

3. Claims 36, 37, 38, 40, 41, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verhulst (5,007,715).

Regarding claim 32, Verhulst discloses a liquid crystal display 36 showing first and second active regions (L,R), a control circuit 34 for controlling the horizontal and vertical scanning operations of the LCD, and a first and second polarizers (28,28'). However, Verhulst does not specify that the image generated by the second active matrix region is entirely white. The examiner takes Official Notice that using liquid crystal display devices to display different color of image signals is well known in the art because they are intended to display all kinds of image signals. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the liquid crystal display device of Verhulst to display the color and white images as claimed.

Regarding claim 37, see col. 4, lines 53-57.

Regarding claim 38, Verhulst does not specify the linear polarizer as claimed. However, Verhulst teaches that it is possible to use other liquid crystal layers (see col. 4, line 65, to col. 5, line 5). Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ linear polarizers as the polarizers in Verhulst to perform the well-known functions as claimed.

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Regarding claims 40, 41, 43 and 44, see rejections to claims 37 and 38, respectively.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 39 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Verhulst (5,007,715).

Regarding claims 39 and 42, in addition of above, Verhulst does not explicitly specify the time division display scheme as claimed. In any event, the columns of sub pictures in Verhulst of are turned on in a successive manner in order to synchronize with the incoming serial image signals, which clearly meet the time division display scheme as claimed.

6. Claim 42 is rejected under 35 U.S.C. 102(b) as being anticipated by Park (4,954,890).

Regarding claim 42, Park shows a step of generating a first image (11), and a step of second image generating a second image (12). The images are generated in a time division manner.

### Allowable Subject Matter

7. Claims 32-35 are allowed.

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8. The following is a statement of reasons for the indication of allowable subject matter: Prior art does not teach or suggest the polarizers and the active matrix circuit together as claimed.

### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shioji (4,957,351) shows first and second display regions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz, can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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